

CALIFORNIA DEBT AND INVESTMENT
ADVISORY COMMISSION

Presents

Investing Public Funds:
Fundamentals of
Managing Your Portfolio

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Sheraton Gateway San Francisco Airport
Burlingame, CA

The Roles and Responsibilities of Investment Advisors

Presented by:

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What Is a Dealer?

- **“Takes a position” in the market**
- **Owns securities**
Buys for and sells from “house” inventory
- **Buys at the bid price; sells at the offer price**
- **Compensation: The difference between the buy price and the sell price; can also earn a commission**
- **Trades for own account to produce income**



What Is a Broker?

- Does not maintain a portfolio of securities
- Buys securities from sellers to resell to buyers
- Compensation: The difference between the buy price and the sell price; can also earn a commission



What Is an *Independent* Investment Advisor?

- A firm whose job is to help investors achieve their investment goals
 - Makes specific investment recommendations
 - Actively manages the portfolio
 - Never takes possession of cash or securities—all assets held at third-party custodian selected by client
- Acts as a fiduciary for clients' assets
- Owns no securities
- Owns no inventory
- Does not purchase securities for resale to clients
- Shops for every security
- Compensation: Typically based on assets under management, but may be a negotiated fee based on transactions or performance



How Does an Investment Advisor Add Value

- Staff comprises professionals trained and experienced in fixed-income investments
 - Portfolio managers, analysts, traders, portfolio accountants, arbitrage rebate specialists
- Full-time focus on portfolio management
- Technical and analytical models
- Access to inventory
- Buying power
- Active management



Types of Investment Advice

- **Non-discretionary**
 - Periodic advice
 - Recommendations
 - You approve; we execute
- **Discretionary**
 - Portfolio management, within previously established strategy, without prior approval for each transaction
- **Other Discretionary**
 - LAIF
 - County pools
 - CAMP (California Asset Management Program)
 - Money market funds and other mutual funds



What Does an Investment Advisor Do?

- Reviews investment policy
- Conducts cash flow analysis
- Develops long-term investment strategy
- Develops short-term investment strategies
- Proactively manages portfolio
- Shops aggressively for best price
- Provides monthly and quarterly reports
- Serves as general resource



Responsibilities of an Investment Advisor: Safely Enhance Returns

- Continually reviews portfolio holdings for opportunities to add value
 - Strategically lengthens and shortens portfolio's duration
 - Executes sector swaps
 - Employs yield curve placements
- Structures the portfolio to perform well in changing market conditions
- Continually monitors credit-worthiness of corporate securities



Investment Advisor's Portfolio Objectives

- Whether managed “in-house” or by an advisor, investment objectives for public agency portfolios are the same.

Safety: Protect principal

Compliance: Invest funds in accordance with the California Government Code and the Investment Policy

Liquidity: Maintain sufficient liquidity

Flexibility: Structure a portfolio that allows for flexibility to react to changes in cash flow needs or market conditions

Return: Optimize returns recognizing need for safety and liquidity



Develop a Long-Term Strategy

- **Conduct statistical study of agency's historical portfolio balances**
- **Determine liquidity needs and balance available for longer-term investments**
- **Develop a strategy that takes into account not only interest earnings but also growth of value of the portfolio**
- **Determine tolerance for market value fluctuations**
- **Discuss industry-standard performance benchmarks**



Develop Long-Term Investment Strategy

- Very short-term portfolios minimize risk at the expense of return, while long-term portfolios have higher returns at the expense of risk.

Risk/Return of Various Benchmarks June 1997 - June 2007

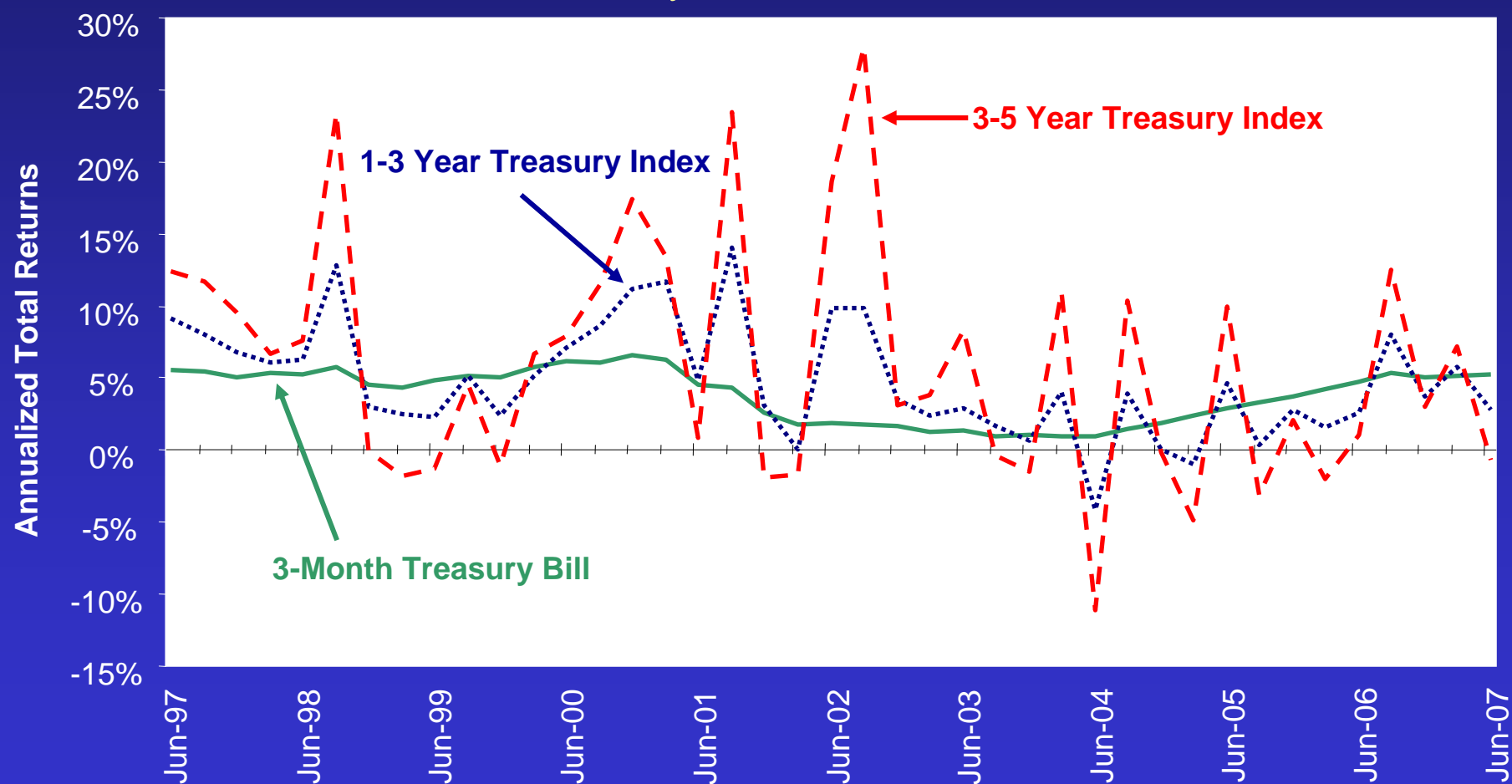
Merrill Lynch Index	Duration	Overall Return	Cumulative Value of \$50,000,000	Quarters With Negative Returns
3-Month Treasury Bill	0.24 Years	3.79%	\$72,550,986	0 out of 40
1-3 Year Treasury Index	1.72 Years	4.61%	\$78,464,318	2 out of 40
1-5 Year Treasury Index	2.33 Years	4.88%	\$80,543,555	6 out of 40
3-5 Year Treasury Index	3.55 Years	5.49%	\$85,335,389	14 out of 40

Source: Bloomberg



Risk/Return Characteristics

Comparison of Annualized Quarterly Returns July 1997 - June 2007



Source: Bloomberg



Commitment to Long-Term Strategy Requires Discipline

Treasury Index	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Past 10 Years
3-Month	5.33%	5.23%	4.85%	6.18%	4.42%	1.78%	1.15%	1.33%	3.07%	4.85%	3.80%
1-3 Year	6.66%	7.00%	3.06%	8.00%	8.30%	5.76%	1.90%	0.91%	1.67%	3.96%	4.76%

Yield History: 2-Year U.S. Treasury
January 1997 – December 2006

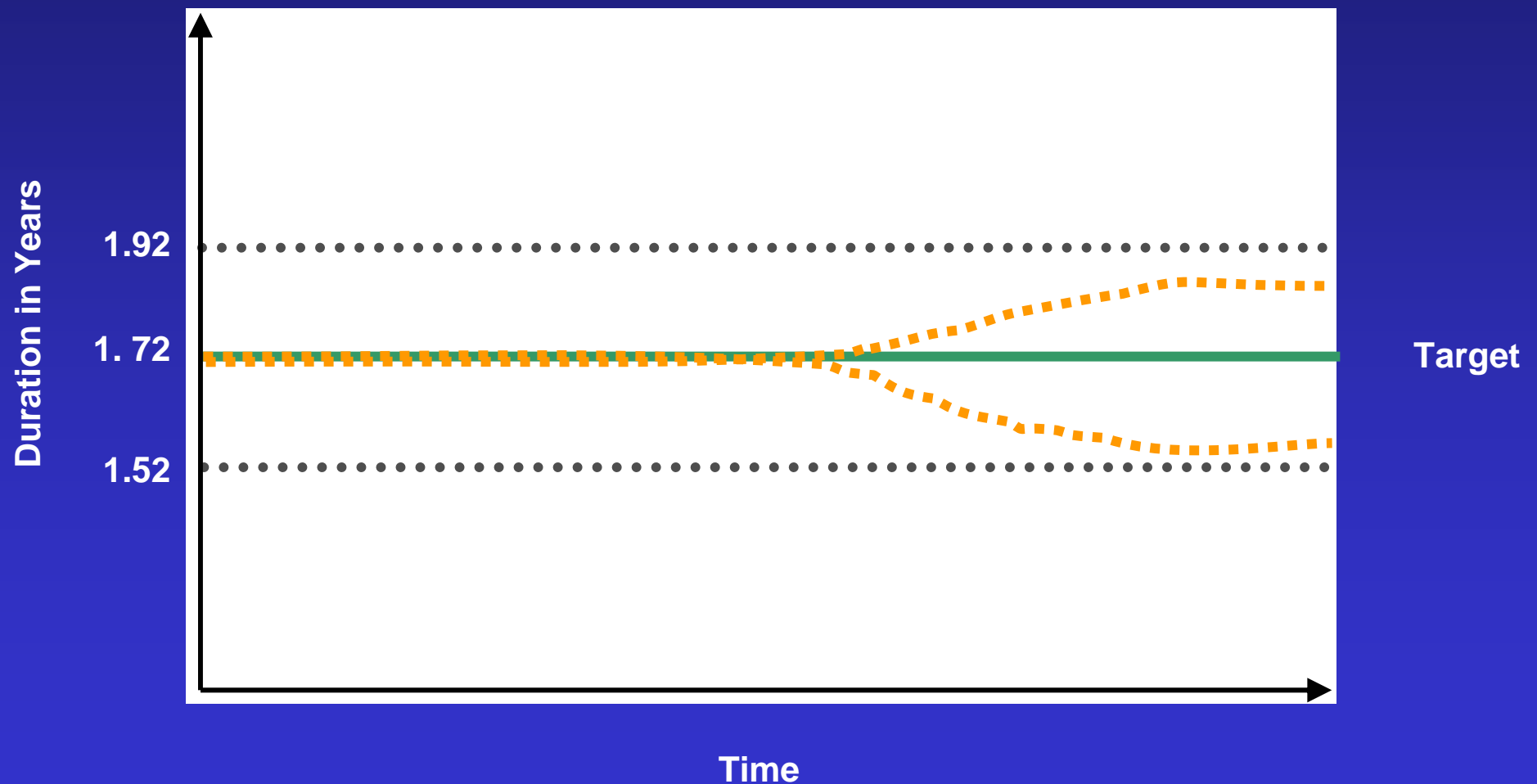


Source: Bloomberg



Commitment to Long-Term Strategy Requires Discipline

Target Duration: 1.72 years





How Investment Advisors Make Decisions

Taking into account the agency's cash flow needs and investment policy, the investment advisor:

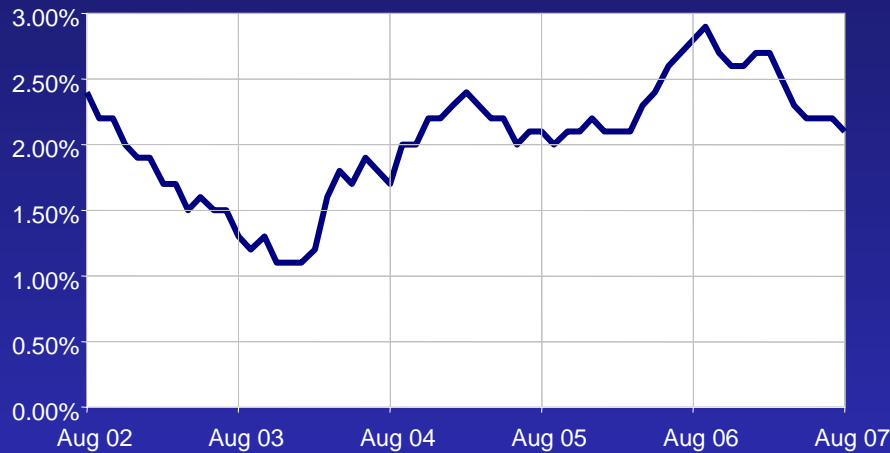
- Analyzes economic data
- Considers today's investment choices in historical context
- Assesses the relative value of each maturity
- Assesses the relative value of each sector
- Assesses the relative value of each security
- Shops among multiple brokers and dealers
- Determines benefit of selling before maturity vs. holding to maturity



How Investment Advisors Add Value: Analyze Economic Data

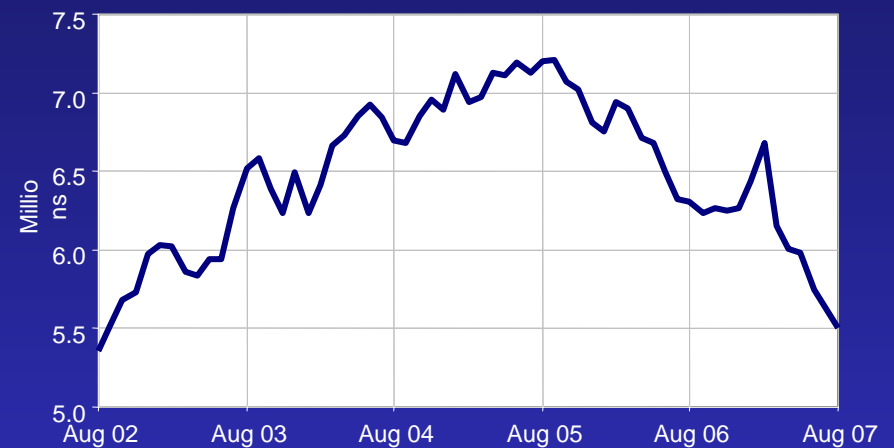
Core CPI

August 2002 – August 2007



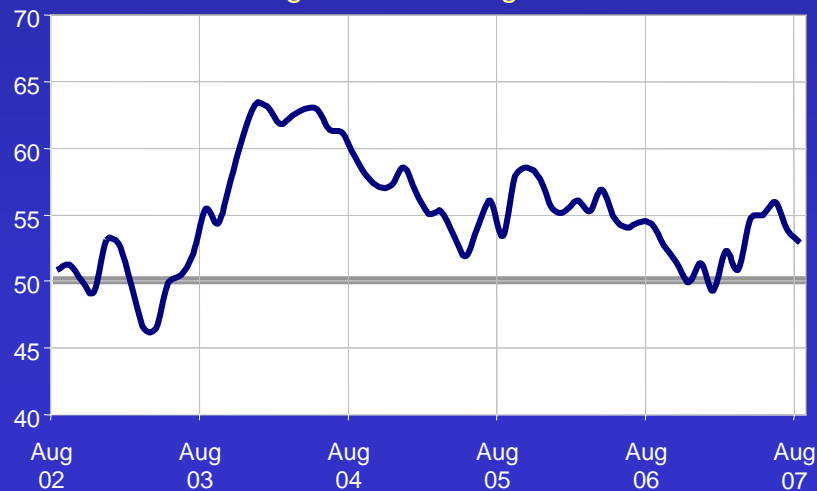
Existing Home Sales

August 2002 – August 2007



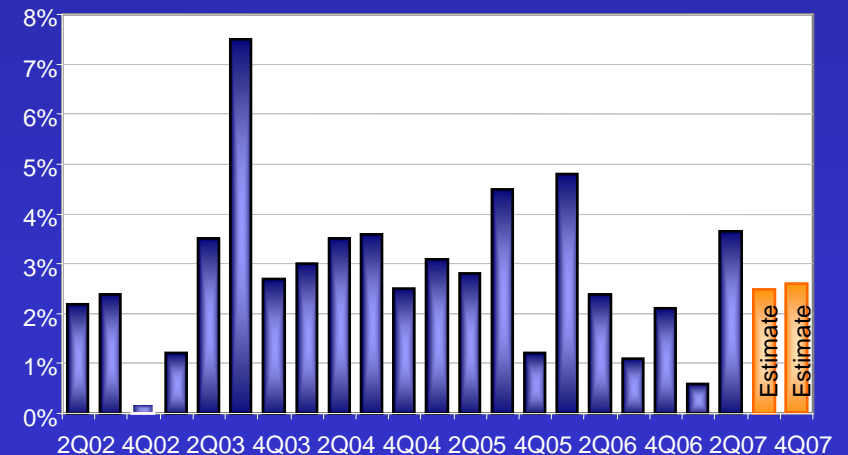
ISM Manufacturing Index

August 2002 – August 2007



GDP

June 2002 – Dec 2007



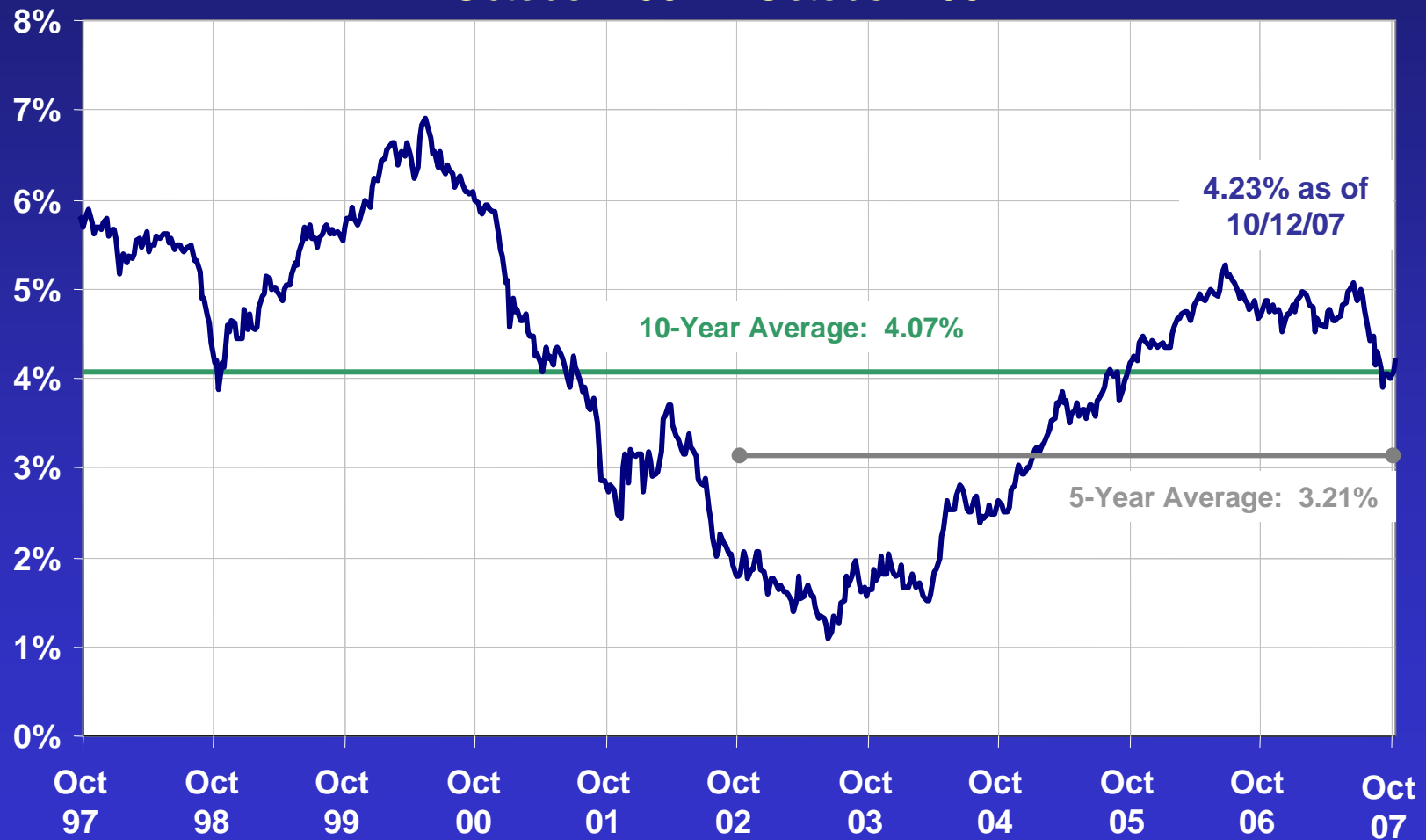
Source: Bloomberg

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How Investment Advisors Add Value: Consider Historical Perspective

2-Year U.S. Treasury Yields October 1997 – October 2007



Source: Bloomberg



How Investment Advisors Add Value: Assess Relative Value Between Sectors

2-Year U.S. Treasury versus 2-Year Federal Agency
September 2002 – September 2007



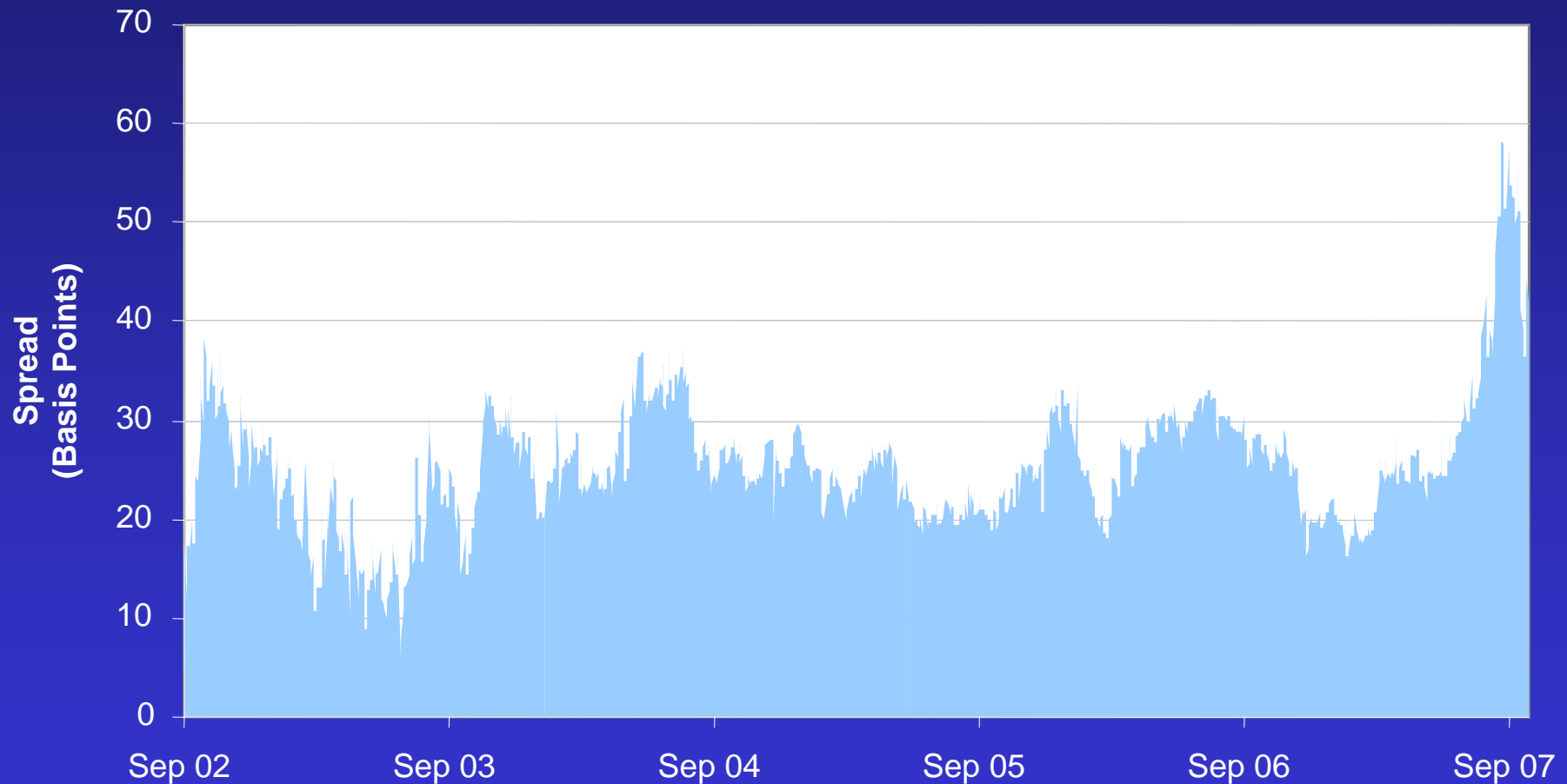
Source: Bloomberg

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How Investment Advisors Add Value: Assess Relative Value Between Sectors

Difference between 2-Year U.S. Treasury and 2-Year Federal Agency Yields
September 2002 – September 2007

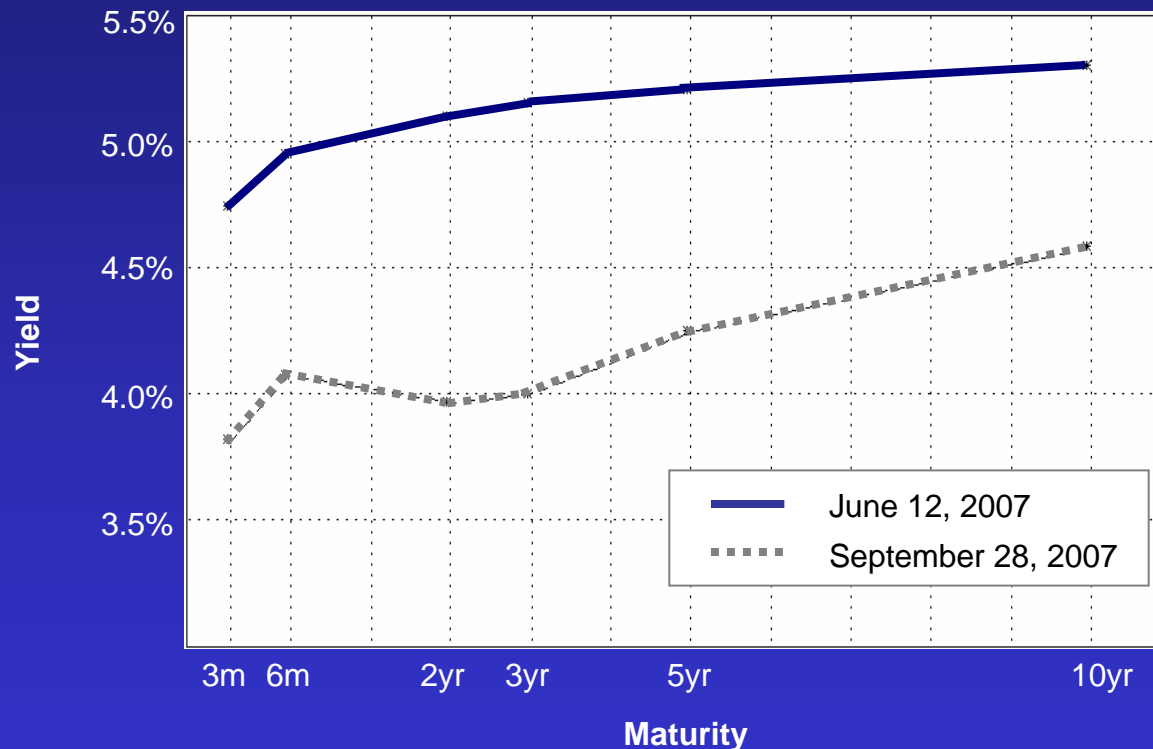


Source: Bloomberg



How Investment Advisors Add Value: Analyze the Yield Curve

U.S. Treasury Yield Curve
June 12, 2007 vs. September 28, 2007



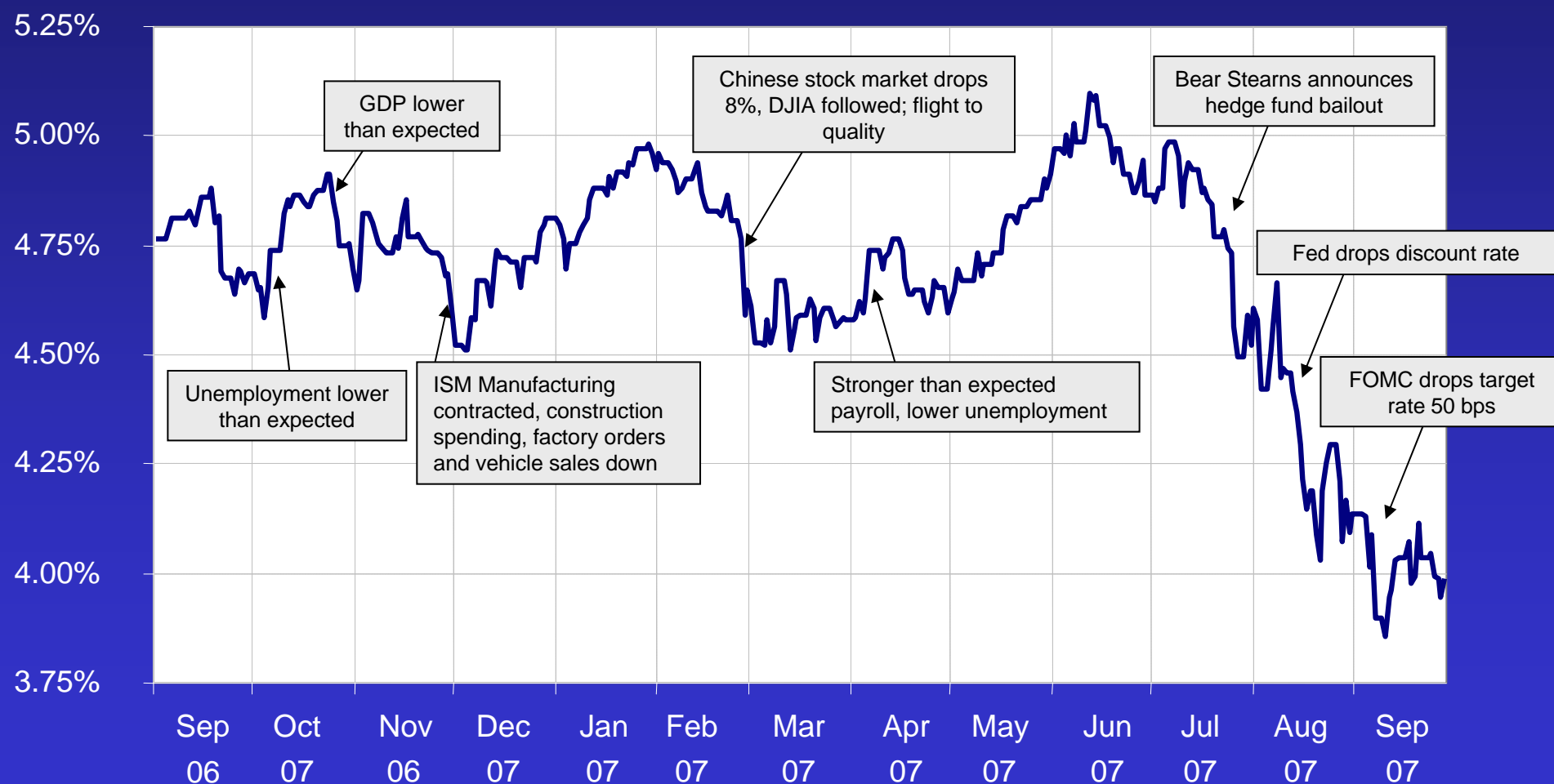
Source: Bloomberg

	<u>6/12/07</u>	<u>9/28/07</u>
3 month	4.73%	3.82%
6 month	4.96%	4.08%
2 year	5.10%	3.99%
3 year	5.15%	4.00%
5 year	5.21%	4.20%
10 year	5.30%	4.59%



How Investment Advisors Add Value: Consider Impact of Economic News on Rates

2-Year U.S. Treasury Yields September 1, 2006 – September 28, 2007



Source: Bloomberg



How Investment Advisors Make Decisions: Credit Analysis

- Credit Committee
- List of approved issuers
 - Restricts exposure to credit risk
 - Better able to monitor credit quality of securities in portfolios



Investment Advisors Select Corporate Credits Based on More than Name and Ratings

Company	S&P	Moody's	Fitch
Washington Mutual	A-	A2	A+
Caterpillar	A	A2	A+
Key Corp	A-	A2	A
Bear Stearns	A+	A1	A+
CIT	A	A1	A

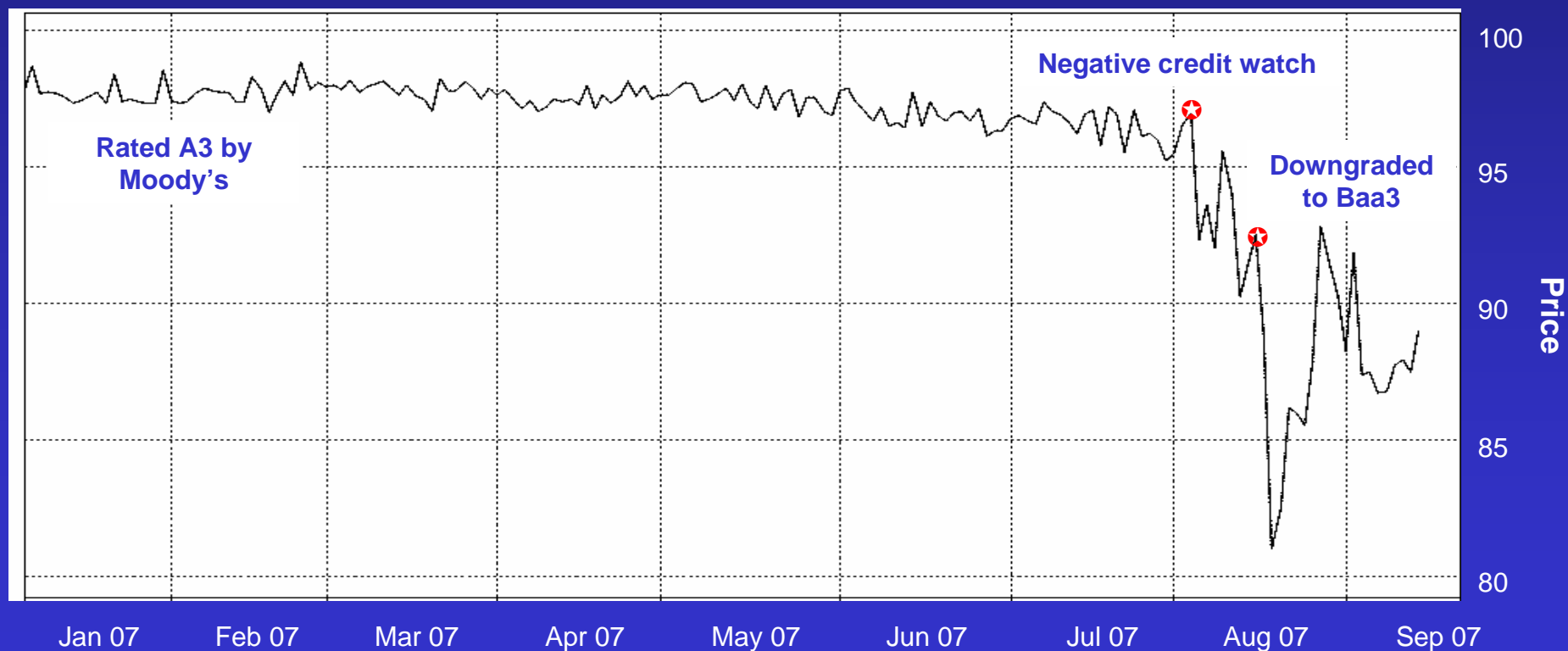
Source: Bloomberg



Credit Rating Is Not Enough

- An investment of \$1,000,000 on August 6, 2007 decreased \$160,000 in value by August 16, 2007.

Price of Countrywide 4.5% Note
Maturing 6/15/10



Source: Bloomberg



Where Investment Advisors Buy Securities: Primary Dealers for U.S. Treasury Obligations

- BNP Paribas Securities Corp.
- Banc of America Securities LLC
- Barclays Capital Inc.
- Bear, Stearns & Co., Inc.
- Cantor Fitzgerald & Co.
- Citigroup Global Markets Inc.
- Countrywide Securities Corporation
- Credit Suisse Securities (USA) LLC
- Daiwa Securities America Inc.
- Deutsche Bank Securities Inc.
- Dresdner Kleinwort Wasserstein Securities LLC
- Goldman, Sachs & Co.
- Greenwich Capital Markets, Inc.
- HSBC Securities (USA) Inc.
- J. P. Morgan Securities Inc.
- Lehman Brothers Inc.
- Merrill Lynch Government Securities Inc.
- Mizuho Securities USA Inc.
- Morgan Stanley & Co. Incorporated
- Nomura Securities International, Inc.
- UBS Securities LLC

Source: Federal Reserve; 9/21/07



Where Investment Advisors Buy Securities: Largest Underwriters for Federal Agencies

	Underwriter	Rank	Mkt Share(%)	Amount USD (Mln)
1)	JP Morgan	1	10.1	58,826.98
2)	Barclays Capital	2	8.7	50,552.90
3)	Deutsche Bank AG	3	8.2	48,011.13
4)	Goldman Sachs & Co	4	7.8	45,836.57
5)	UBS	5	7.6	44,204.55
6)	Merrill Lynch & Co	6	7.3	42,596.64
7)	Lehman Brothers	7	6.8	39,931.10
8)	Citi	8	6.6	38,734.83
9)	Royal Bank of Scotland	9	5.5	31,953.93
10)	Bank of America	10	5.2	30,189.78
11)	Morgan Stanley	11	4.0	23,581.25
12)	HSBC	12	2.8	16,176.48
13)	Credit Suisse	13	2.7	15,938.00
14)	Bear Stearns & Co Inc	14	2.6	15,442.59
15)	FTN Financial	15	2.0	11,743.21
16)	BNP Paribas Group	16	1.5	9,039.53
17)	Morgan Keegan & Co	17	1.5	8,649.67
18)	RBC Capital Markets	18	1.0	6,116.28
19)	Nomura Holdings Inc	19	1.0	6,067.83
Market Statistics				
Total Amount 584,371 USD (Mln)		Issues 4,938		#Underwriters 66

Source: Bloomberg

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Direct Issuers of Commercial Paper

- Abbey National NA
- American General Finance
- AIG Funding
- American Express
- Calyon North America
- Citigroup
- CommoLoCo Inc
- Chevron Corporation
- Chevron Funding
- DaimlerChrysler NA
- Dexia Delaware, LLC
- Exxon Mobil Corp
- FCAR Owner Trust
- Fortis Banque Luxemburg
- GECC
- GMAC
- HSBC
- Intesa Funding LLC
- LaSalle Bank
- M&I Bank FSB
- Mint
- Marshall & Ilsley
- Natexis US Finance Co
- New Center Asset
- National City Credit
- San Paolo IMI US Finance
- Prudential Funding
- Rabobank USA
- Royal Bank of Scotland
- Scaldis Capital
- Societe Generale
- Sears Roebuck
- State Street
- Toyota Credit Puerto Rico
- Toyota Motor Credit
- UBS Finance
- UnionBancal
- Zions Bancorp



The Importance of Each Basis Point

- 100 basis points = 1%
- 50 basis points = 1/2%
- 1 basis point = 1/100 of 1%

\$1 million x 1 basis point for 1 year = \$100

\$5 million x 1 basis point for 1 year = \$500

\$1 million x **5 basis points** for 1 year = \$500



The Importance of Each Basis Point

- 100 basis points = 1%
- 50 basis points = 1/2%
- 1 basis point = 1/100 of 1%

\$5 million x 5 basis points for 5 years = \$12,500



Investment Advisor Market Access

- TradeWeb
- Market Axess
- Bloomberg Bond Trader
- Boom System
- Broker/dealer proprietary trading systems



Importance of Market Access and Thorough Shopping

Maturity Yield Broker

Agency Discount Note: Broker Inventory on October 2, 2007

Size (M)	Issuer	Maturity	SD	Dsc/Cpn	Yield	DV	TYP	Tick
49,553	FNMA DISCOUNT	10/16/07		4.550	4.558	GS	AGD	FNDN
100,000	FHLB DISC CORP	10/16/07-10/25/07			0.000	GS	AGD	FHDN
	WINDOW SUBJECT							
17,300	FHLB DISC CORP	10/17/07	3	4.620	4.629	LEH	AGD	FHDN
4,000	FHLB DISC CORP	10/18/07		4.550	4.559	CSFB	AGD	FHDN
900,000	FNMA DISCOUNT	10/18/07-10/23/07		4.480	4.489-4.492	FTNF	AGD	FNDN
500,000	FNMA DISCOUNT	10/18/07-10/23/07		4.480	4.489-4.492	BA	AGD	FNDN
2,755	FREDDIE DISCOUNT	10/18/07		4.400	4.409	BARC	AGD	FMCDN
10,122	FHLB DISC CORP	10/19/07		4.630	4.640	MER	AGD	FHDN
64,000	FHLB DISC CORP	10/19/07		4.600	4.610	MS	AGD	FHDN
73,000	FC DISCOUNT NOTE	10/24/07		4.650	4.663	UBS	AGD	FCDN
5,000	FNMA DISCOUNT	10/24/07	1	4.630	4.643	LEH	AGD	FNDN
1,800	FHLB DISC CORP	10/24/07	3	4.630	4.643	LEH	AGD	FHDN
33,540	FC DISCOUNT NOTE	10/24/07		4.550	4.563	BA	AGD	FCDN
20,000	FC DISCOUNT NOTE	10/24/07		4.550	4.563	BARC	AGD	FCDN
2,063	FHLB DISC CORP	10/26/07		4.550	4.564	CSFB	AGD	FHDN
100,000	FHLB DISC CORP	10/26/07			0.000	GS	AGD	FHDN
	WINDOW SUBJECT							
438,721	FREDDIE DISCOUNT	10/29/07		4.600	4.616	CSFB	AGD	FMCDN

Source: Bloomberg, rates as of October 2, 2007

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Comparison of Three Year Federal Agency Offerings: Bear Stearns

	Ticker	Cpn	Maturity	Call	Type	Cusip	Amount	Offer
1)	FHLNC	5.300	02/27/09	02/27/08	Onetime	3128X5K56	1.50	100-20
2)	FHLB	4.250	04/21/10	10/09/07	Anytime	3133NXTW9	9.00	98-26
3)	FNNA	4.750	06/22/10	10/12/07	Anytime	3136F6RN1	7.50	99-18
4)	FFCB	5.700	06/22/11	12/22/08	Anytime	31331XF80	19.83	60 oas1 14%
5)	FFCB	5.300	09/06/11	03/06/09	Anytime	31331X2F8	27.05	60 oas1 14%
6)	FHLNC	5.250	10/03/11	10/03/08	Quarterly	3128X6NT0	7.02	100-4
7)	FHLB	4.875	10/19/11	10/19/09	Anytime	3133XNFP1	18.37	100-00
8)	FNNA	5.500	03/21/12	03/21/08	Quarterly	3136F8HT5	32.90	5.30 YTW
9)	FHLB	5.250	05/29/12	05/29/09	Anytime	3133XKUL7	53.14	50 oas1 14%
10)	FFCB	5.750	06/29/12	12/29/08	Anytime	31331XH70	8.07	55 oas1 14%
11)	FHLNC	6.000	07/24/12	07/24/08	Quarterly	3128X6GR1	30.56	55 oas1 14%
12)	FNNA	5.125	10/02/12	10/02/08	Onetime	3136F8TH8	20.80	99-28
13)	FFCB	5.600	09/26/14	12/26/07	Anytime	31331X4K5	46.38	100-00
14)	FFCB	6.050	07/02/15	07/02/08	Anytime	31331XG55	8.17	5.25% YTC
15)	FHLNC	6.000	07/13/15	07/13/09	Quarterly	3128X6FX9	37.39	50 oas1 14%
16)	FNNA	5.050	05/21/18	11/21/07	Semi-Annu	3136F3UJ3	1.62	70 oas1/14
17)	FHLNC	5.000	07/02/18	10/09/07	Anytime	3128X1LX3	1.74	70 oas1/14
18)	FHLNC	0.000	04/15/19	10/15/07	Semi-Annu	3128X24W2	49.57	5.875% YTM
19)	FHLNC	5.500	03/22/22	03/22/12	Onetime	3128X5V70	0.06	98.5
20)	FHLB	5.900	06/08/22	06/08/12	Anytime	3133XL4F7	18.36	60 oas1/14



Comparison of Three-Year Federal Agency Offerings: Credit Suisse

CALLABLES	NEXT CALL DATE	CALL TYPE	AMT OUT	SIZE IN MM	ASK	COMMENT	CUSIP
1) FHLB 5.05 04/11	10/15/08	Q	30MM	13.160	99.965	3.5NC1 BERN	33XNLF6
2) FHNA 5 ⁵ / ₈ 06/11	06/13/08	Q	125MM	28.560	100.545	4NC1 1X	3136F7F69
3) FHLB 5.6 08/11	08/10/09	A	15MM	6.895	101.578	4NC2	3133XLR6
4) FFCB 5 ¹ / ₄ 09/11	09/14/09	A	15MM	6.945	100.798	4NC2 AMER	31331X2L5
5) FHLB 5.6 08/12	08/02/10	A	40MM	37.550	102.301	5NC3	3133XLQW6
6) FHLNC 5.45 09/12	09/05/08	Q	250MM	75.000	100.451	5NC1 1X	3128X6LB0
7) FHNA 5.2 09/12	09/18/08	Q	525MM	45.550	100.058	5NC1 1X	3136F8SU0
8) FHLNC 6 08/13	08/07/08	Q	50MM	35.240	100.987	6NC1	3128X5FG8
9) FHLNC 5 ³ / ₈ 01/14	01/09/09	Q	1MM	17.993	100.097	6.5NC1.5	3128X5WT1
10) FHLB 5.8 06/14	06/13/08	A	50MM	31.140	100.274	7NC1	3133XL4E0
11) FHLNC 5.65 02/17	02/23/09	Q	850MM	75.000	100.374	9.5NC1.5	1X28X5F60
12) FHLB 5.85 06/17	06/08/09	A	95MM	65.890	100.653	10NC2	3133XKZ81
13) FHNA 6 ¹ / ₄ 08/17	08/15/08	Q	450MM	72.007	100.891	10NC1	3136F8QH8
14) FHLNC 5 ⁷ / ₈ 10/17	10/17/08	Q	50MM	23.000	100.038	10NC1 BERN	128X6NT9
15) FHLB 5 ⁵ / ₈ 02/20	10/09/07	A	60MM	8.225	98.308	12NC1M AN	3133XAH9
16) FHLNC 6 01/22	01/26/09	Q	210MM	45.924	99.976	14.5NC1.53	128X5XZ6
17) FHLNC 6 03/22	03/02/09	Q	150MM	65.000	100.057	14.5NC1.53	128X5K31
18) FHNA 6 ¹ / ₄ 03/22	12/29/07	Q	700MM	71.500	99.949	15NC3M	3136F8GS8
19) FHNA 6 10/26	10/05/11	Q	100MM	13.517	101.046	20NC4	3136F73B1
20) FHNA 6.008 06/27	06/21/10	Q	50MM	48.000	101.053	20NC3 1X	31398ADB5



Comparison of Three Year Federal Agency Offerings: Morgan Stanley

MTN Offerings			Call			Size	
Tkr	Cpn	Maturity	Date	Offer	Comment	(Mln)	CUSIP
FHLNC	3.125	11/20/08	11/20/07	56	oas	2.850	3128X1FH5
FMNA	3.000	11/21/08	10/12/07	53	oas	0.500	3136F3TR7
FHLB	3.250	12/18/08	12/18/07	54	oas	5.000	31339X6V1
FMNA	4.010	04/29/09	10/29/07	57	oas	1.000	3136F5RR4
FHLB	4.650	10/15/09	10/15/08	52	oas Cont	9.400	3133XNFM6
FHLB	4.050	02/09/10	10/09/07	64	oas	2.000	3133X3P80
FFCB	5.100	04/09/10	01/09/08	99.99	Cont	41.845	31331X5D0
FFCB	5.700	07/11/11	07/11/08	71	oas Cont	6.198	31331XK68
FHLB	5.700	07/25/11	07/25/08	71	oas Cont	10.200	3133XLN25
FHLB	5.700	07/25/11	07/25/08	71	oas Cont	6.135	3133XLLY7
FHLB	4.875	10/19/11	10/19/09	52	oas Cont	9.650	3133XNHB0
FHLB	5.350	02/06/12	02/06/09	65	oas Cont	33.325	3133XJR34
FHLB	5.400	02/13/12	02/13/09	64	oas Cont	57.085	3133XJUR7
FHLNC	5.650	05/23/12	05/23/08	75	oas	100.000	3128X6AK2
FHLNC	6.000	07/02/12	07/02/08	74	oas Q-berm	26.780	3128X6EP7



Comparison of Three Year Federal Agency Offerings: BNP Paribas

Ticker	Cpn	Maturity	Call	Call Freq.	Offer	Comments	Cusip
FHNA	4.750	12/13/10	10/12/07	Anytime	101.645	60/14	3135A0PA1
FHLB	5.375	12/13/10	12/13/07	Quarterly	99.915	65/14	3133XJ2L1
FHLB	4.000	03/24/11	12/24/07	Quarterly	97.639	68/14	31339XSR6
FHLNC	4.230	03/24/11	10/09/07	Anytime	98.179	68/14	3128X2V51
FHLB	5.750	06/27/11	06/27/08	Anytime	100.584	63/14	3133XLEY5
FHLB	5.625	08/22/11	08/22/08	Anytime	100.607	63/14	3133XLY72
FHLB	5.600	09/12/11	09/12/08	Anytime	100.629	65/14	3133XLZ48
FHLB	5.400	09/12/11	09/12/08	Anytime	100.347	65/14	3133XN2Z3
FHLB	5.200	05/15/12	05/15/09	Anytime	100.265	65/14	3133XKP25
FHNA	6.000	06/28/12	12/28/07	Quarterly	100.207	95/14	3136F8PU3
FHLB	5.800	07/09/12	07/09/08	Anytime	100.575	70/14	3133XLK28
FHNA	5.750	08/14/12	08/14/08	Quarterly	100.618	65/14	3136F8QS7
FHLB	5.780	05/22/13	05/22/09	Anytime	101.344	65/14	3133XFJ80
FHLB	5.750	01/02/14	10/09/07	Anytime	99.936	75/14	3133XJFR4
FHLNC	5.000	02/26/14	10/09/07	Anytime	98.092	75/14	3128X0D30



Comparison of Three-Year Federal Agency Offerings

Security	Maturity	Yield to Maturity	Call Type	Next Call	Yield to Call
New Issue FHLB	10/17/11	5.07%	One-time	10/17/08	5.07%
New Issue FHLB	10/19/11	4.88%	One-time	10/19/09	4.88%
Secondary FHLB	10/24/11	5.09%	One-time	10/24/08	5.20%
Secondary FHLB	10/24/11	5.17%	One-time	4/28/08	5.43%

Source: Bloomberg, rates as of October 2, 2007



Broker Commission for New Issue Agencies

Fee of .1% = \$1,000 commission per \$1 million sold

FED HOME LN BANK FHLB 4 3/8 03/10

FEE INFORMATION /SALES RESTRICTIONS

Sales Restrictions
N/A

Fee Information
TOTAL GROSS .1%

Governing Law
N/A



Request for Proposal

- Qualifications of the firm
- Qualifications of the investment team
- Assets under management
- Investment philosophy
- Quality of service
- Performance
- References



What to Look for in an Investment Advisor

- Reputation
- Experience managing funds for local governments
- Investment philosophy/approach
- Years of experience of the firm and its investment professionals
- Amount of assets under management for public agencies
- Flexibility to meet your specific needs
- Good performance



Investment Advisory Fees

- Typically no more than 15 basis points (0.15%) of assets under management

Enhanced earnings should more than offset the fees

Thank you!